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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,334	08/23/2005	Edeltraud Hagemeister	PAT-01078	7934

26922 7590 11/13/2008

BASF CORPORATION
Patent Department
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EXAMINER

CHEUNG, WILLIAM K

ART UNIT	PAPER NUMBER
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1796

NOTIFICATION DATE	DELIVERY MODE
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11/13/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/531,334	Applicant(s) HAGEMEISTER ET AL.	
	Examiner WILLIAM K. CHEUNG	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>121505, 041405</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. In view of the amendment filed July 24, 2008, the restriction requirement set forth June 24, 2008 has been withdrawn. Claims 1-19 are pending. Claims 1-19 are examined with merit.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

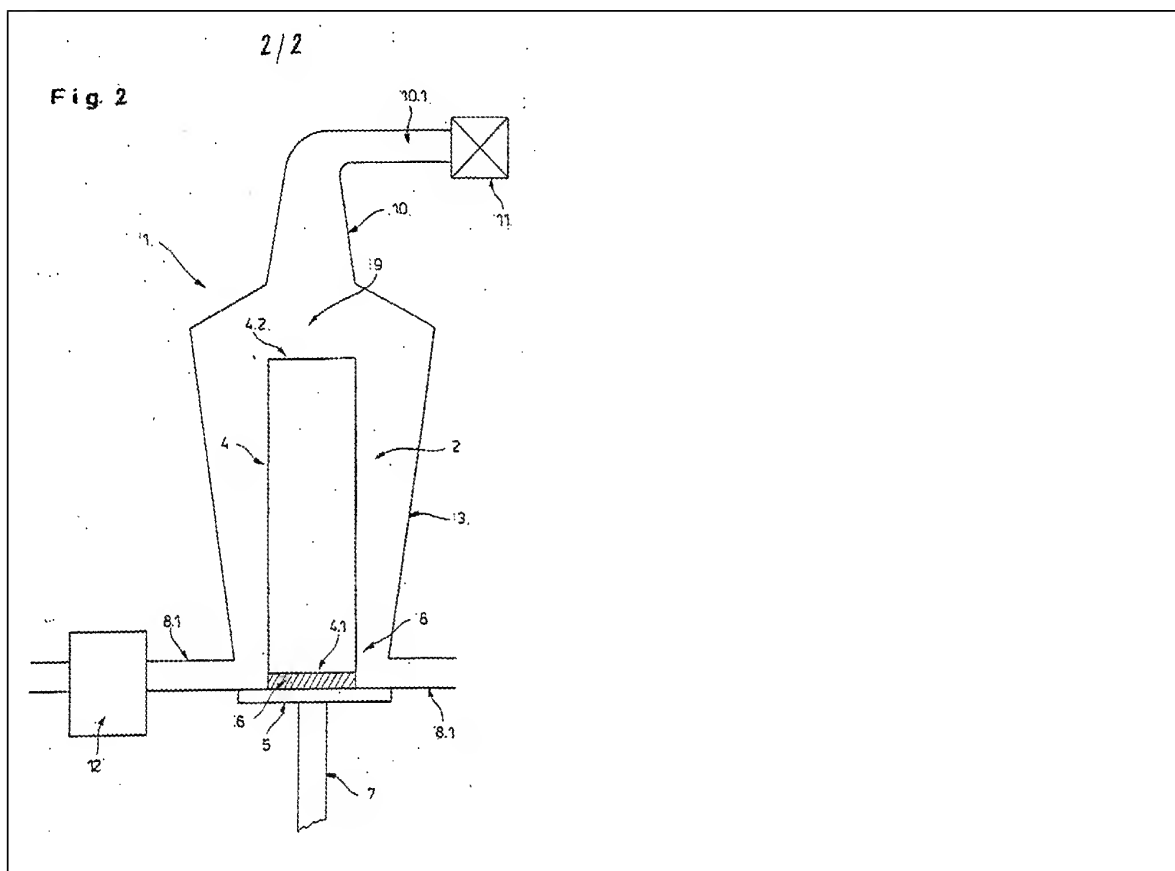
A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10-24 of copending Application No. 10/549,624. Although the conflicting claims are not identical, they are not patentably distinct from each other because the apparatus as claimed

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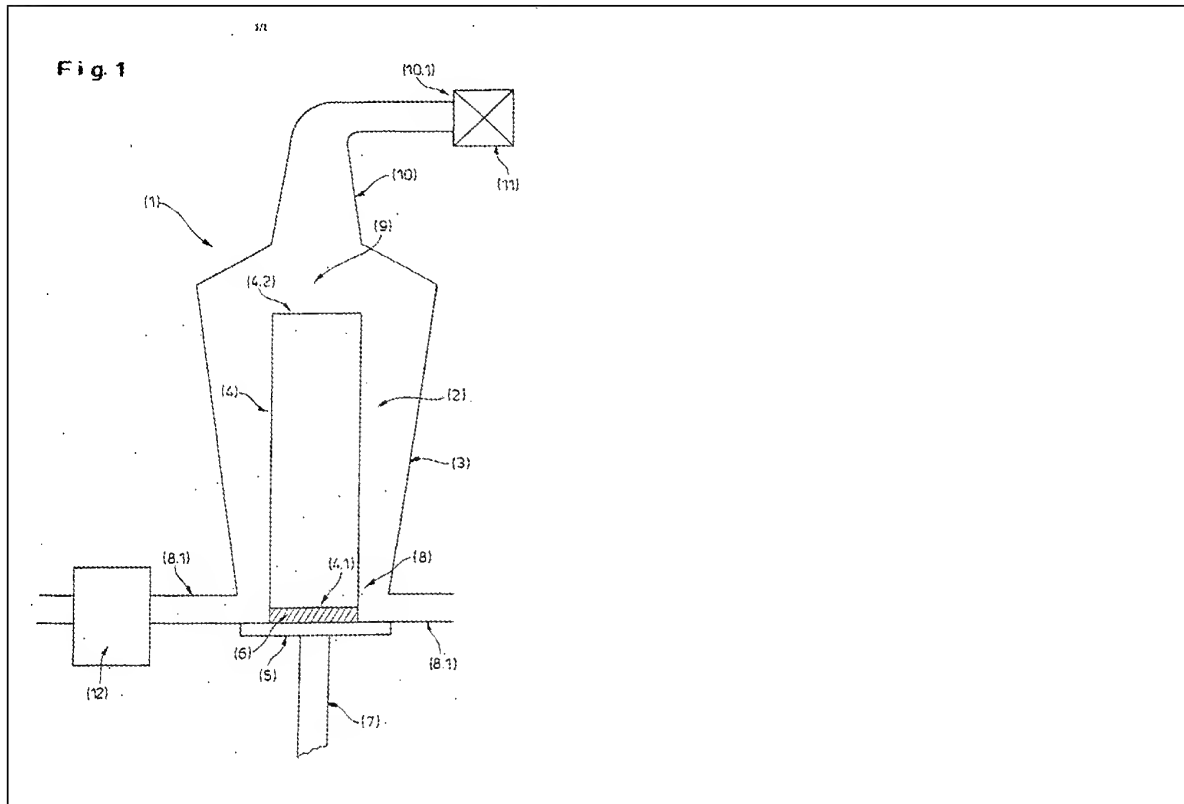
seems to be able to perform the functions of the apparatus of claims 10-24 of copending Application No. 10/549,624, particularly in light of Figure 2 of copending Application No. 10/549,624.



This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 1-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-11 of copending Application No. 10/486,893. Although the conflicting claims are not identical,

they are not patentably distinct from each other because the apparatus as claimed seems to be able to perform the functions of the apparatus of 1-11 of copending Application No. 10/486,893, particularly in light of Figure 1 of copending Application No. 10/486,893.



This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Objections

5. Claims 1-19 are objected to because of the following informalities: Claims 1-19 are objected because the claims include reference number of a figure of an apparatus.

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However, the figure is not part of the claims. Applicants should amend the claims so that the claims would not rely on the figure to describe the invention. Applicants must recognize that claims are interpreted in light of the specification, but the specification can not be read into the claims. The instant issue is that the figure being referred to in not read into the claims.

6. Claim 1 (line 3, 5, 8, 9), the recitations "having" seem redundant in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 5, 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 (line 2), claim 6 (line 2), the recitations "the decrease" are considered indefinite. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

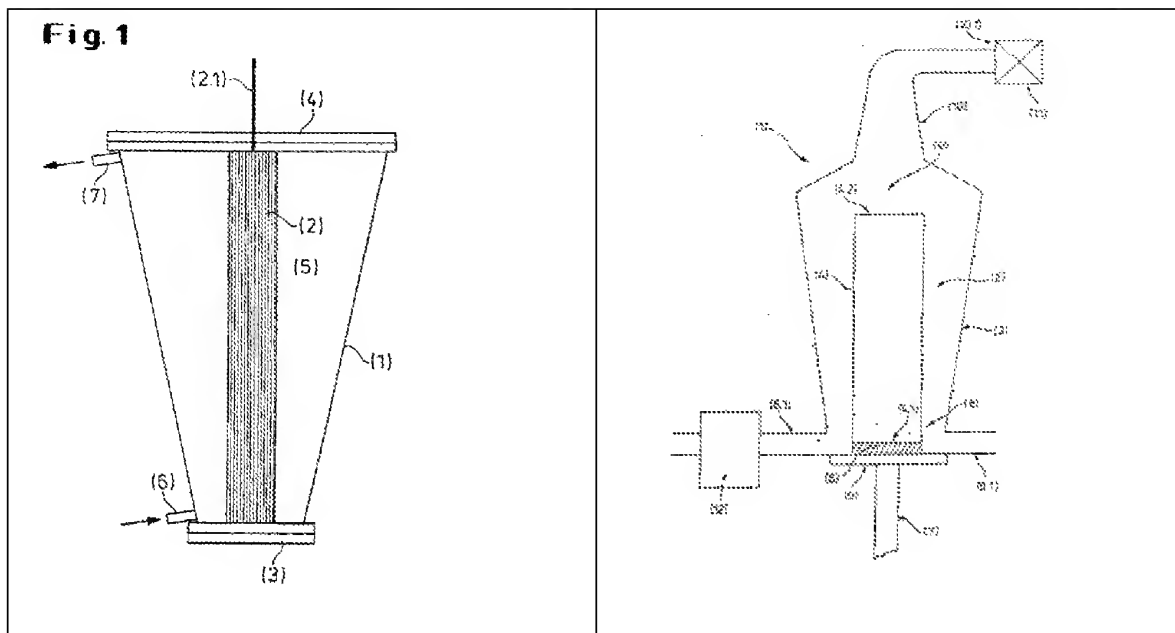
10. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moritz et al. (WO 0000280), translated in Moritz et al. (US 7,122,161).

- | |
|---|
| 1. (Previously Presented) A Taylor reactor (101, 201, 301, 401) comprising a reactor housing (103, 203, 303, 403), having a rotor (104, 204, 304, 404) which is disposed in the volume enclosed by the reactor housing (103, 203, 303, 403) and is rotatable about an axis, having a reaction volume (102, 202, 302, 402) formed between the inner periphery of the reactor housing (103, 203, 303, 403) and the outer periphery (104.3, 204.3, 304.3, 404.3) of the rotor (104, 204, 304, 404), having at least one inlet (108.1, 208.1, 308.1, 408.1) for the reactants and/or process media and having at least one outlet (110, 210, 310, 410) for the reaction products, disposed in the direction of the axis (A) at a distance from the inlet (108.1, 208.1, 308.1, 408.1), wherein the reactor housing (103, 203, 303, 403) and/or the rotor (104, 204, 304, 404) are equipped such that the cross section of the reaction volume (102, 202, 302, 402) initially rises from the inlet (108.1, 208.1, 308.1, 408.1) to the outlet (110, 210, 310, 410) but the rise in cross section does not increase at least over part of the length of the rotor (104, 204, 304, 404). |
|---|

10. (Previously Presented) A Taylor reactor having a reactor housing (103, 203, 303, 403), having a rotor (104, 204, 304, 404) which is disposed in the volume enclosed by the reactor housing (103, 203, 303, 403) in such a way as to be rotatable about an axis (A), having a reaction volume (102, 202, 302, 402) formed between the inner periphery (103.1, 203.1, 303.1, 403.1) of the reactor housing (103, 203, 303, 403) and the outer periphery (104.3, 204.3, 304.3, 404.3) of the rotor (104, 204, 304, 404), having at least one inlet (108.1, 208.1, 308.1, 408.1) for the reactants and/or process media, in particular as claimed in claims 1, **wherein** an outlet region (109, 209, 309, 409) which opens out into an outlet (110, 210, 310, 410) is provided which in the reactor housing (103, 203, 303, 403) at one end face of the rotor (104, 204, 304, 404) adjoins the reaction volume (102, 202, 302, 402) and narrows to an outlet (110, 210, 310, 410) and **wherein** the end face of the rotor (104, 204, 304, 404) is designed such that the reaction volume (102, 202, 302, 402) opens out at least essentially without deadspaces into the outlet (110, 210, 310, 410).

13. (Previously Presented) A Taylor reactor having a reactor housing (503), having a rotor (504) which is disposed in the volume enclosed by the reactor housing (503) in such a way as to be rotatable about an axis (A), having a reaction volume (502) formed between the inner periphery (503.1) of the reactor housing (503) and the outer periphery (504.3) of the rotor (504), having at least one inlet (508.1) for the reactants and/or process media and having at least one outlet (510) for the reaction products, in particular as claimed in claims 1, **wherein** the outlet (510) opens out into the reaction volume (502) at a radial distance from the axis (A).

Moritz et al. (col. 13, claim 1) disclose a Taylor reactor having all the basic features as claimed.



According to Figure 1 that applicants' claims are referencing to, the difference between the invention of claims 1-19 and Moritz et al. is that Moritz et al. do not disclose some of the specific features being claimed, such as rotatably mounted at one end in the reactor floor and unmounted on the other below the outlet region, and a pressure maintenance valve.

However, since Moritz et al. (col. 13, claim 1) disclose all the basic features as claimed in a claim, Moritz et al. have clearly indicated the criticality of all the basic features in a Taylor reactor for performing a reaction in claim 1. Hence, all the other non-disclosed features are considered non-essential. Nevertheless, the scope of claim 1 of Moritz et al. clearly fully encompasses and teaches all the essential features of a Taylor reactor for conducting a reaction using a Taylor reactor. Motivated by the

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expectation of success of performing a chemical reaction with the Taylor reactor of Moritz et al., it would have been obvious to one of ordinary skill in art to apply "routine engineering optimization" practices to modify or to adjust the non-essential features of the Taylor reactor of Moritz et al. to obtain the minor variation version of the Moritz et al. to obtain the Taylor reactor as claimed.

Regarding claims 17-19, Moritz et al. (col. 10, line 42, 53) clearly teach the process for using the disclosed apparatus for making polymers, film, paints, adhesives, and coating materials.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K. Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10531334/William K Cheung/
Primary Examiner, Art Unit 1796

William K. Cheung, Ph. D.
Primary Examiner
November 7, 2008